Guidance for Live Model Ultrasound Scanning in Educational and Conference Settings

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Audience: ACEP national educational conference, meetings, chapters, and any point-of-care ultrasound scanning session outside of direct patient care.

Guidance

1. Ultrasound examinations on live models should be done for educational purposes only as described below.

2. The models should be informed on the intent and risks/benefits of ultrasound examination done in a judicious, careful manner using As Low as Reasonably Achievable (ALARA) principles with careful timed exposure with on appropriate body areas.

3. Discussion of US in clinical protocols, scenarios, and applications is encouraged.

4. Ultrasound educational courses:
   - Models should be informed of US bioeffects and safety
   - Consent should be obtained
   - Probe dwell time per window should be minimized
   - Models should be circulated to different US applications on different parts of the body
   - Phantoms and simulators are encouraged to supplement basic ultrasound maneuvers, invasive procedures, and pathology
   - Ultrasound of pregnant patients should be done rarely and very judiciously for a limited duration in a group setting. Early pregnancy and Doppler use is especially discouraged. Expert supervision is highly recommended.
   - Pediatric patients should only be used when specific anatomic or functional issues cannot be demonstrated by adult patients. Older patients are encouraged with patient and parental consent.
   - At all times, ALARA, bioeffects indices, and various tissue effects should be respected.

5. Ultrasound demonstrations and commercial booths:
   - Models should be informed of US bioeffects and safety.
   - Consent should be obtained.
   - Probe dwell time per window should be minimized.
   - Models should be circulated to different US applications on different parts of the body.
   - Phantoms and simulators are encouraged to supplement basic ultrasound maneuvers, invasive procedures, and pathology.
   - Educational objectives should be discussed before each live scanning session but can be facilitated by communication methods below.
   - Multiple communication methods may be used to communicate educational goals and information including verbal, written, poster, digital and other techniques.
   - Scripting with educational objectives is encouraged.
   - Pregnant and pediatric patients are discouraged unless group demonstrations are done with expert supervision.
   - Instrumentation and knobology may be facilitated by using phantoms.
   - Imaging by vendors on themselves or physicians on themselves should be done rarely, and should not be expected or encouraged.
   - Equipment with FDA approval or clearance must be used.
   - Appropriate draping to protect patient modesty and privacy should be used.
ACEP Suggested Scripting at Vendor supported exhibits with live models

1. Display placards with station information and education objectives

2. Handouts on machine highlighting new and key features appropriate to provider audience

3. Script for vendor professional assisting in live scanning

   a. Hello Dr. __________________. Would you like to participate in this live model educational session featuring __________________equipment with _______________ probes?

   b. Features to be discussed today include:
      i. Machine operation
      ii. Machine safety
      iii. Common controls
      iv. New features
      v. Probe features

   c. Scanning guidelines
      1. 30 seconds - 1 minute
      2. Change in body area
      3. Short duration of Doppler

   d. Questions?